

SPEECH RECOGNITION DEVICE

Background of the invention

Field of the invention

The present invention relates to the field of speech
5 recognition enabling the automation of services through remote telecommunications means, as for example, automated directory dialling services. Particularly, the present invention relates to implementations in which the speech recognition is supported by an unobtrusive operator intervention.

10 Description of the prior art

Automatic speech recognition (ASR) integrates with telecommunication systems to deliver automated services. These systems implement human-machine dialogs which comprise successive verbal interaction between the system and the user. Such dialog systems
15 are responsive to spoken commands that are usually defined in a grammar or word spotting list, from which models are built such, for example, as statistical hidden Markov models (HMM), well known in the art. These models are often built up from smaller models such as sub-word phoneme models. When the user calls the system and utters a
20 phrase, the ASR system computes one or more recognition hypotheses by scoring command models against the speech input. Each hypothesis is defined by a recognition string representing the transcription of the uttered phrase and a confidence score indicating how much the recognition process is confident about the recognised string. In
25 conventional systems, the confidence score is usually compared to a rejection threshold value T . Typically, if the confidence score is higher than the rejection threshold value, then the hypothesis is accepted by the system that performs an operation accordingly to the recognised string. If the confidence score is lower than the rejection threshold T , then the hypothesis is rejected by the system that may, for example, prompt the user to utter again its input. In-grammar user inputs should have
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